Clinical Advisory Subcommittee of the Emergency Medical Care Committee

Meeting Agenda
10:15 A.M. Thursday, December 18, 2025
Location: SLOEMSA Conference Room
2995 McMillan Ave, Ste 178
San Luis Obispo, CA 93401

Members
CHAIR: Dr. Stefan Teitge, *County Medical Society*
Vacant, *ED Physician*
Dr. Kyle Kelson, *ED Physician, Adventist*
Dr. Lucas Karaelias, *ED Physician Dignity*
Katie Wong, *MICNs*
Rob Jenkins, *Fire Service Paramedics*
Nate Otter, *Ambulance Paramedics*
Paul Quinlan, *Fire Service EMTs*
Vacant, *Air Ambulance*
Arneil Rodriguez, *Ambulance EMTs*
Casey Hidle, *Lead Field Training Officer*
VACANT, *Medical Director Appointee*

Staff
STAFF LIAISON: Ryan Rosander, *EMS Division Director*
Kaitlyn Blanton, *EMS Coordinator*
Dr. William Mulkerin, *Medical Director*
Rachel Oakley, *EMS Coordinator*
Eric Boyd, *EMS Coordinator*
Alyssa Vardas, *EMS Admin Assistant III*

AGENDA	ITEM	LEAD
Call to Order	Introductions	Dr. Teitge
	Public Comment	
Summary Notes	Review of Summary Notes October 16, 2025	
Discussion	**Policy Revisions and Development:** • 320 EMT Certification 2025 • 321 EMT Recertification 2025 • 215 EMT Basic Scope of Practice • 2XX EMT Optional Skills Approval • 216 Emergency Medical Technician Accreditation • 2XX EMT AED Service Provider Approval • 204 Public Safety AED Service Provider	Rachel Oakley
Discussion	**Protocol Development:** • 662 Burns • 664 Diving Emergencies	Ryan Rosander
Adjourn	**Declaration of Future Agenda Items** • Roundtable	Dr. Teitge
	Next meeting date – TBD 1015 hrs. – **EMSA Conference Room**	

	2995 McMillan Ave. Suite 178 San Luis Obispo, CA 93401	

Clinical Advisory Subcommittee
of the Emergency Medical Care Committee

DRAFT Meeting Minutes
10:15 AM October 16, 2025
2995 McMillan Way, Suite 178
San Luis Obispo, CA 93401

MINUTES

MEMBERS' PRESENT:
Chair Dr. Stefan Teitge, *County Medical Society*
Casey Hidle, *Lead Field Training Officer*
Dr. Heidi Hutchison, *ED Physician, Tenet*
Katie Wong, *MICNs*
Nate Otter, *Ambulance Paramedics*
Lisa Epps**,** *Air Ambulance*
Tim Nurge, *Medical Director Appointee*

MEMBERS ABSENT:
Rob Jenkins, *Fire Service Paramedics*
Dr. Kyle Kelson*, ED Physician, Tenet*
Tim Nurge, *Medical Director Appointee*
Dr. Lucas Karaelias*, ED Physician Dignity*
Paul Quinlan, *Fire Service EMTs*
Jeffrey Hagins*, Air Ambulance*
Arneil Rodriguez*, Ambulance EMTs*

EMS AGENCY STAFF PRESENT:
Eric Boyd, EMSA
Rachel Oakley, EMSA
Bill Mulkerin, EMS Medical Director

EMS AGENCY STAFF ABSENT:
Kaitlyn Blanton, EMSA
Alyssa Vardas, EMS Administrative Assistant
Ryan Rosander, EMSA

1. CALL TO ORDER

Ryan Rosander called the meeting to order at 10:21 a.m. He led the review of the meeting protocols and meeting agenda.

2. REVIEW AND APPROVAL OF June 19, 2025, Summary Notes

Action: Heidi Hutchison moved approval of June 2025, Clinical Advisory Committee Meeting Summary Notes. Casey Hidle seconded. Motion carried unanimously with no abstentions.

The meeting discussed implementing a separate protocol for leaving behind Naloxone kits, supported by the opioid overdose coalition, to minimize financial impact on partner agencies. Fentanyl test strips were explained as a tool to detect fentanyl in unexpected substances. Concerns were raised about the deployment time of mechanical CPR devices, suggesting robust training and CQI programs. The group also considered allowing EMTs to place supraglottic airway devices on pediatric patients and discussed the need for compatible suction devices. Finally, the group reviewed protocols for cardioversion in AFib and SVT, emphasizing the importance of clear language and appropriate escalation of doses. The meeting discussed the need to align BLS training with ACLS standards, addressing concerns about legal implications and training consistency. Synchronized cardiac sequences and C notes were debated, with a consensus to remove them. The group agreed to use ACLS doses and liberalize fluid use up to 1000 ml with a repeat dose. Mechanical CPR devices were identified for rework. A motion to approve the changes, either as written or amended, was made and seconded, with no opposition.

Action Items

- Rework the mechanical CPR device protocol to address concerns around training and quality improvement.
- Revise the AFib and SVT protocols to align with ACLS recommendations on cardioversion dosing.
- Pare down the language in the drowning protocol to be more concise and bullet-point style.

Outline

Leave Behind Naloxone Protocol

- Discusses the implementation of a separate protocol for leaving behind Naloxone as part of the opioid withdrawal treatment protocol.
- The goal is to allow crews to leave behind Naloxone if they deem it necessary, with support from the opioid overdose coalition.
- Kits from the coalition will be provided for free, aiming to minimize financial impact on partner agencies.
- Clarifies that crews are not required to use the entire kit but can just get Naloxone if needed.

Fentanyl Test Strips and Documentation

- Discusses the typical kit from the opioid coalition, which includes fentanyl test strips.
- The purpose of fentanyl test strips is to detect fentanyl in substances that are not expected to contain it, such as ecstasy or meth.
- Raised concerns about documentation for recipients of kits, suggesting it should not be linked to patient care documentation.

Opioid Withdrawal and Mechanical CPR Devices

- Updates on the opioid withdrawal protocol, emphasizing the need to consider lead time for Naloxone.
- Discussion shifts to mechanical CPR devices, with Speaker 7 expressing concerns about time off the chest during deployment.

- Suggests robust training programs to ensure deployment times are below 10 seconds.
- Discuss the challenges of deploying mechanical CPR devices in two-person BLS crews and the need for standardized deployment across agencies.

Challenges with Mechanical CPR Devices

- Emphasizes the importance of CQI programs to monitor and improve deployment times.
- Suggestion for pulling the mechanical CPR device policy for rework and re-presentation to the group.
- Discusses having two Lucas devices and two AEDs for evaluation and training purposes.

I-Gel Placement for Pediatric Patients

- Proposes allowing EMTs to place I-gels on pediatric patients and medics to place them on adults.
- Discussion on the need for additional training for EMTs to place I-gels on pediatric patients.
- Emphasizes the importance of having suction devices compatible with I-gels.
- Suggestion for adding a note about the need for suction devices in the protocol.

Drowning Protocol and Cardioversion

- Introduces a new drowning protocol, highlighting the importance of addressing oxygenation and ventilation issues.
- Discussion on the need to differentiate between unstable and extremis patients for cardioversion.
- Suggestion for simplifying the language in the drowning protocol to make it easier to follow.
- Proposes using manufacturer recommendations for cardioversion doses, with a focus on starting at higher doses for unstable patients.

Final Adjustments and Voting

- Suggestion for voting on the drowning protocol and other changes after making adjustments.
- Discussion on the need for clear language in the protocol to avoid confusion and ensure proper implementation.
- Emphasis of the importance of provider judgment and flexibility in using protocols.
- The group agrees to rework the protocols and bring them back for final approval.

Discussion on BLS Training and Legal Concerns

- Discussed the department's request about Red Cross or AHA training, noting the difference in training methods and the legal concerns some staff have about using different methods.
- Suggestion of removing synchronized cardiac sequences and C notes, questioning their necessity.
- Explains the rationale behind including synchronized mode and the potential confusion it might cause for some staff who might not refer to the notes.
- The conversation touches on the need to rework the training materials to align more closely with ACLS standards.

Adjustments to Training Materials and Dose Guidelines

- Group proposes reworking the training materials to make them more ACLS-like and seeks input on whether to bring them back as is or rework them.
- The group suggests using ACLS doses, which is agreed upon by the group.
- Group discusses the need to liberalize fluid use in training, allowing for up to 1000 milliliters, with a repeat dose if necessary.

- The group discusses the need to pull mechanical CPR devices for reworking and decides to approve the other changes either as written or amended.

3. ITEMS FOR NEXT AGENDA

SGAs for EMTs, Pediatric SGAs for Paramedics, Mechanical CPR devices, and OB protocols.

4. PUBLIC COMMENT

None

5. ADJOURNMENT

Action: Heidi Hutchison moved to move the protocols and policies forward to EMCC. Stefan Teitge seconded. Motion carried unanimously.

Stefan Teitge adjourned the meeting at 11:12 am

MEETING DATE	December 18, 2025
STAFF CONTACT	Rachel Oakley
SUBJECT	EMT Policies and PSFA AED Service Provider Policy Revisions
SUMMARY	Policy 320, EMT Certification • Updated policy with new rush fee timeframe, to match other credentialling policies. • Added language for EMTs to notify our Agency when employed by a relevant employer. • Added language regarding removing livescan results that do not accompany an application after 30 days. • Added return info to bottom of Application, Attachment A. Policy 321, EMT Recertification • Updated policy with new rush fee timeframe, to match other credentialling policies. • Added language for EMTs to notify our Agency when employed by a relevant employer. Policy 215, EMT Basic Scope of Practice Additional Skills • Separated out the basic scope skills from optional skills, as only optional skills require training and accreditation to utilize skills. • Basic Scope of Practice All Additional Skills are going to be automatically approved for Agencies to utilize, however, plans for skill(s) competency verification(s) and EMSQIP must be received. • Language added for when skills can be utilized. • Written notification must be made if skills are not wanted by an Agency. Policy 2XX, EMT Optional Skills Approval • Separated out from Basic Scope of Practice Additional Skills, as Optional Skills need additional training and accreditation to utilize skills. • Language added for when skills can be utilized. • Added all Optional Skills to the list offered. • New application and training requirements attachments. • Program approval fee added. Policy 216, EMT Accreditation • Language added for when skills can be utilized. • Accreditation lists must be completed and turned in when updated. • No fee for accreditation at this time. NEW Policy 2XX, EMT AED Service Provider Approval • Establish criteria required by law.

	• Data requirement is being collected via Image Trend, no separate reporting required. • Procedure will consist of collecting attestations from Agencies. <u>Policy 204, PSFA AED Service Provider Approval</u> • Updated policy to reflect current regulations. • Data requirement is being collected via Image Trend, no separate reporting required. • Procedure will consist of collecting attestations from Agencies.
REVIEWED BY	SLOEMSA Administrator, Medical Director, Staff, and Operations Committee.
RECOMMENDED ACTION(S)	Approve and move to EMCC.
ATTACHMENT(S)	Draft policies listed above are attached.

POLICY #320: EMERGENCY MEDICAL TECHNICIAN CERTIFICATION

I. PURPOSE

A. To establish criteria as defined by Title 22 of the California Code of Regulations (CCR), for the process of issuing a State of California emergency medical technicians (EMT) certification through the County of San Luis Obispo (SLO) Emergency Medical Services Agency (SLOEMSA ~~Agency~~).

II. SCOPE

A. This policy applies to all individuals seeking initial certification as an EMT in ~~the County of San Luis Obispo (~~SLO~~)~~.

III. POLICY

A. C~~urrent CCR~~hanges in state regulations will supersede ~~information in~~ this policy ~~upon codification~~.

B. To be eligible for certification as an EMT, an individual must be eighteen (18) years of age of older.

C. All information on the EMT application is subject to verification. A candidate who supplies information found to be fraudulent may be subject to disciplinary action as outlined in SLOEMSA ~~Agency~~ Policy #300: Investigation and Disciplinary Process.

D. All applicants are required to inform ~~the~~ SLOEMSA ~~Agency~~ of the following:

1. If convicted of any crime other than a minor traffic violation.
2. Any certification or licensure action against, or denial of an EMT, Advanced EMT, EMT-II certificate, paramedic license or MICN authorization including active investigations by an EMS Agency in another county or in the case of a paramedic, licensure action by the S~~s~~tate EMS Authority.
3. Any action against or denials of any EMS-related certification or license of another state or other issuing entity, including active investigations.
4. Any action against any health-related license.

E. It is the responsibility of the Certified EMT to notify ~~the~~ SLOEMSA ~~Agency~~ within seven (7) days of any arrest or change in their eligibility status. Failure to report such actions may result in disciplinary action.

F. Any item listed in section D that is~~action or active investigation~~ indicated on the application, must include a~~n~~ written explanation ~~letter regarding the investigation and/or conviction(s) in detail,~~ and ~~must include~~ copies of verifying documentation from the arresting authority, certifying or licensing entity, and or court. A f~~F~~ailure to report ~~such actions~~ may result in an incomplete application and certification denial.

G. All applications that indicate or are discovered to have circumstances that may preclude issuance of EMT certification will be subject to additional review as outlined in SLOEMSA ~~Agency~~ Policy #300: Investigation and Disciplinary Process.

H. An application for EMT certification will be denied if the individual fails to meet the application requirements for certification.

I. A candidate for EMT certification whose check returns for insufficient funds may be subject to disciplinary action as outlined in SLOEMSA ~~Agency~~ policy # 101: Fee Collection.

J. ~~The~~ SLOEMSA ~~Agency~~ will issue an EMT certificate card to eligible applicants within forty-five (45) calendar days after successful completion of all certification requirements. If a request is made to expedite a completed application, including receipt of Live Scan results, within five (5) business days~~72 hours~~ of the request, a rush fee will apply.

K. The effective date of certification will be the date of issue.

L. Certification as an EMT will be statewide and for a maximum of two years ~~or such other time period as specified in the current CCR~~.

M. An EMT must notify the SLOEMSA ~~-~~ within thirty (30) calendar days~~,~~ of any change in mailing address.

~~M.~~N. An EMT must notify SLOEMSA within ten (10) calendar days of employment or change in employment, when using their EMT certification for job functions.

~~N.~~O. Once certified and based on the continuous quality improvement process, the employer or the SLOEMSA ~~Agency~~ Medical Director may determine that an EMT warrants additional training, observation or testing. The employer, the SLOEMSA ~~Agency~~ Medical Director or his/her designee may create a specific and targeted program of remediation based upon the identified need of the EMT. If there is disagreement between the EMT, the employer and/or the SLOEMSA ~~Agency~~ Medical Director, the decision of the SLOEMSA ~~Agency~~ Medical Director will prevail.

~~O.~~P. If the individual fails to complete this targeted program of remediation the SLOEMSA ~~Agency~~ Medical Director may suspend or revoke the certification for a minimum of one (1) year and up to two (2) years.

Q. It is the responsibility of the EMT to notify ~~the~~ SLOEMSA ~~Agency~~ within seven (7) days of any arrest or change in their eligibility status. Failure to report such actions may result in disciplinary action.

~~P.~~ A livescan result submitted without a completed application will be removed from the background database after thirty (30) days.

~~Q.~~R. The SLOEMSA ~~Agency~~ Medical Director must approve any exception to certification requirements.

IV. PROCEDURE

A. A candidate for EMT certification must submit a completed EMT Application for Certification -Attachment A to ~~the~~ SLOEMSA ~~Agency~~ that includes the following:

1. Pay the current non-refundable application fee.
2. A ~~C~~current government-issued photo identification proving that the individual is eighteen (18) years of age or older.
3. An individual who meets one of the following criteria is eligible to apply for initial certification:
   a. Proof of successful passing of the National Registry written and skills examinations and either:
      (1) Proof of completion of a California EMT training program approved pursuant to the current CCR or approved out-of-state initial EMT training course, within the last two years, or
      (2) Possess a current and valid out-of-state EMT certificate.
   b. Current National Registry certification as an EMT- Basic, EMT-Intermediate or Paramedic.
   c. Current out-of-state EMT-Intermediate or Paramedic certification.
   d. Current and valid California Advanced EMT or EMT-II certification or current and valid California Paramedic license.
4. Proof of current certification as a Cardiopulmonary Resuscitation (CPR) Provider according to the American Heart Association guidelines for BLS Healthcare Providers or other course provider approved by the SLOEMSA ~~Agency~~ Medical Director.
5. Proof of criminal record clearance from the California Department of Justice and Federal Bureau of Investigation, utilizing the Request for Live Scan Service Form - Attachment B.

V. AUTHORITY

- Health and Safety Code Division 2.5
- California Code of Regulations, Title 22, Division 9

VI. ATTACHMENTS

A. EMT Application for Certification/Re-certification

B. Request for Live Scan Service Form

Approvals:

EMS Agency, Administrator	

EMS Agency, Medical Director	

~~Approvals:~~

~~EMS Agency, Administrator~~	
~~EMS Agency, Medical Director~~	

POLICY #321: EMERGENCY MEDICAL TECHNICIAN RECERTIFICATION

I. PURPOSE

A. To establish criteria as defined by Title 22 of the California Code of Regulations (CCR), for the process of issuing a State of California emergency medical technicians (EMT) re-certification through the County of San Luis Obispo (SLO) Emergency Medical Services Agency (SLOEMSA ~~Agency~~).

II. SCOPE

A. This policy applies to all individuals wishing to recertify as an EMT in ~~the County of San Luis Obispo (~~SLO~~)~~.

III. POLICY

A. C~~urrent CCR~~~~hanges in state regulations~~ will supersede ~~information in~~ this policy ~~upon codification~~.

B. All information on the EMT application is subject to verification. A candidate who supplies information found to be fraudulent may be subject to disciplinary action as outlined in SLOEMSA ~~Agency~~ Policy #300: Investigation and Disciplinary Process.

C. All applicants are required to inform ~~the~~ SLOEMSA ~~Agency~~ of the following:

1. If convicted of any crime other than a minor traffic violation.
2. Any certification or licensure action against, or denial of an EMT, Advanced EMT, EMT-II certificate, paramedic license or MICN authorization including active investigations by an EMS Agency in another county or in the case of a paramedic, licensure action by the ~~s~~State EMS Authority.
3. Any action against or denials of any EMS-related certification or license of another state or other issuing entity, including active investigations.
4. Any action against any health-related license.

D. It is the responsibility of the Certified EMT to notify ~~the~~ SLOEMSA ~~Agency~~ within seven (7) days of any arrest or change in their eligibility status. Failure to report such actions may result in disciplinary action.

E. Any item listed in section C that~~action or active investigation~~ is indicated on the application ~~or by notification~~, must include a~~n~~ written explanation ~~letter regarding the investigation and/or conviction(s) in detail,~~ and ~~must include~~ copies of verifying documentation from the arresting authority, certifying or licensing entity, and or court. A ~~F~~failure to report ~~such actions~~ may result in an incomplete application and certification revocation.

F. All applications that indicate or are discovered to have circumstances that may preclude issuance of EMT certification will be subject to additional review as outlined in SLOEMSA ~~Agency~~ Policy #300: Investigation and Disciplinary Process.

G. An application for EMT recertification will be denied if the individual fails to meet the recertification requirements.

H. A candidate for EMT recertification whose check returns for insufficient funds may be subject to disciplinary action as outlined in EMS Agency policy # 101: Fee Collection.

~~F.~~

~~G.~~I. ~~The~~ SLOEMSA ~~Agency~~ will issue an EMT certificate card to eligible applicants~~individuals~~ within forty- five (45) calendar days after successful completion of all recertification requirements. If a request is made to expedite an application within five (5) business days~~72 hours~~ of the request, ~~certification expiration or another specific request,~~ a rush fee will apply.

1. If the EMT recertification requirements are met within six (6) months prior to the expiration date, the effective date of certification will be the date immediately following the expiration date of the current certificate. The certification expiration date will be the final day of the final month of the two (2) year period.
2. If EMT recertification requirements are met more than six (6) months prior to the expiration date, the effective date of certification will be the date the individual satisfactorily completes all certification requirements and has applied for recertification. The certification expiration date must not exceed two (2) years and will be the final day of the final month of the two (2) year period.

~~H.~~J. In order to be eligible for recertification after a lapse in certification, the following criteria must be met:

1. An individual whose certification has a lapse of less than six (6) months must comply with the criteria as listed in the procedure section of this policy.
2. An individual whose certification has a lapse of six (6) months or more, but less than twelve (12) months, must comply with the criteria in the procedure section of this policy and complete an additional twelve (12) hours of continuing education (CEH) for a total of thirty-six (36) CEH.
3. An individual whose certification has a lapse of twelve (12) months or more must comply with the criteria in the procedure section, parts A and B of the procedure in this policy, complete an additional twenty-four (24) CEH for a total of forty-eight (48) CEH, and pass the National Registry Emergency Medical Technician (NREMT) certification examination ~~pursuant to the CCR, Title 22, Section 100079~~. All CEs must be dated within the twenty-four (24) months prior to applying for reinstatement.

~~I.~~A. ~~An application for EMT recertification will be denied if the individual fails to meet the recertification requirements.~~

~~J.~~A. ~~A candidate for EMT recertification whose check returns for insufficient funds may be subject to disciplinary action as outlined in EMS Agency policy # 101: Fee Collection.~~

K. An EMT must notify ~~the~~ SLOEMSA ~~Agency~~ within thirty (30) calendar days~~,~~ of any change in mailing address.

~~K.~~L. An EMT must notify SLOEMSA within ten (10) calendar days of employment or change in employment, when using their EMT certification for job functions.

~~L.~~M. Certification as an EMT will be statewide and for a maximum of two years ~~or such other time period as specified in the current CCR~~.

~~M.~~N. Based on the continuous quality improvement process, the employer or the SLOEMSA ~~Agency~~ Medical Director may determine that an EMT warrants additional training, observation or testing. The employer, the SLOEMSA ~~Agency~~ Medical Director or his/her designee, may create a specific and targeted program of remediation based upon the identified need of the EMT. If there is disagreement between the EMT, the employer and/or the SLOEMSA ~~Agency~~ Medical Director, the decision of the SLOEMSA ~~Agency~~ Medical Director will prevail.

~~N.~~O. If the individual fails to complete this targeted program of remediation the SLOEMSA ~~Agency~~ Medical Director may suspend or revoke the certification for a minimum of one (1) year and up to two (2) years.

~~O.~~P. The SLOEMSA ~~Agency~~ Medical Director must approve any exception to recertification requirements.

IV. PROCEDURE

A. A candidate for EMT recertification must submit a completed EMT Application for Certification/Re-certification -Attachment A to ~~the~~ SLOEMSA ~~Agency~~ that includes the following:

1. Pay the current non-refundable application fee.
2. A current, government-issued, photo identification proving that the individual is eighteen (18) years of age or older.
3. Proof of successful completion of an EMT refresher course or twenty-four (24) hours of CE.
4. A completed EMT Skills Competency Verification Form - Attachment C.
5. Proof of current certification as a Cardiopulmonary Resuscitation (CPR) Provider according to the American Heart Association guidelines for BLS Healthcare Providers or other course provider approved by the SLOEMSA ~~Agency~~ Medical Director.

B. If a candidate has not previously completed a criminal record clearance from the California Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI), proof of a criminal record clearance must be submitted to ~~the~~ SLOEMSA ~~Agency~~. Proof may be submitted by requesting that a criminal record clearance

from the DOJ and the FBI be sent to ~~the~~ SLOEMSA ~~Agency~~ and the California EMS Authority utilizing the Request for Live Scan Service Form - Attachment B.

V. AUTHORITY

- Health and Safety Code Division 2.5~~, Section 1797.210 and 1798.200~~
- California Code of Regulations, Title 22, Division 9~~, Chapter 2, Section 100080-100081 and Chapter 6~~
- ~~California Penal Code, Section 11105~~

VI. ATTACHMENTS

A. EMT Application for Certification/Recertification

B. Request for Live Scan Service Form

C. EMT Skills Competency Verification Form

Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

~~Approvals:~~

~~EMS Agency, Administrator~~	
~~EMS Agency, Medical Director~~	

POLICY #215: EMT Basic Scope of Practice

Additional Skills

I. PURPOSE

A. To establish the intent and requirements of the Medical Director for the County of San Luis Obispo (SLO) Emergency Medical Services Agency (SLOEMSA) regarding the use of Emergency Medical Technician (EMT) Basic Sope of Practice Additional Skills in SLO.

II. SCOPE

A. This policy applies to SLO EMS Provider Agencies, fire departments and ambulance providers, that employ individuals as EMTs for emergency medical care in the SLO Emergency Medical Services (EMS) system.

III. DEFINITIONS

A. Emergency Medical Technician (EMT): A person who has successfully completed an EMT course, passed all required tests, and has a current and valid California EMT certification.

B. EMT Basic Scope of Practice Additional Skills: Refers to skills listed in Title 22 of California Code of Regulation (CCR) as EMT basic skills that require Medical Director approval.

C. EMS Provider Agency: An agency or organization in SLO that is responsible for and approved to provide emergency medical care using certified/accredited EMTs and/or paramedics.

IV. POLICY

A. All EMS Provider Agencies will be automatically approved to utilize all EMT Basic Scope of Practice Additional Skills.

1. Monitor intravenous lines delivering glucose solutions or isotonic balanced salt solutions including Ringer's lactate for volume replacement. Monitor, maintain, and adjust if necessary in order to maintain, a preset rate of flow and turn off the flow of intravenous fluid;

2. Transfer a patient, who is deemed appropriate for transfer by the transferring physician, and who has nasogastric (NG) tubes, gastrostomy tubes, heparin locks, foley catheters, tracheostomy tubes and/or indwelling vascular access lines, excluding arterial lines;

3. Administer naloxone or other opioid antagonist by intranasal and/or intramuscular routes for suspected narcotic overdose;

4. Administer epinephrine by auto-injector for suspected anaphylaxis and/or severe asthma;

5. Perform finger stick blood glucose testing; and

6. Administer over the counter medications, when approved by the medical director, including, but not limited to: Aspirin.

B. The EMS Provider Agency will be responsible for notifying SLOEMSA if they would like to participate or opt out of EMT Basic Scope of Practice Additional Skills utilization.

C. The EMS Provider Agency will be responsible for the initial and ongoing competency verifications for each EMT employed.

D. An EMT shall successfully complete competency verifications for each skill prior to use of the skill in the field.

E. Continued competency verification must be completed and documented every two (2) years or more frequently as demonstrated by the EMS Provider Agency's EMS Quality Improvement Program (EMSQIP).

F. EMTs verified to use any Basic Scope of Practice Additional Skill must be authorized by their EMS Provider Agency prior to utilizing skills.

G. An EMT authorized to utilize Basic Scope of Practice Additional Skills may assist in the competency verification of those skills

H. EMTs who fail to meet and/or maintain competency verification requirements may not be authorized to use their EMS Provider Agency's approved skills.

I. When an authorized EMT has started a Basic Scope of Practice Additional Skill and an ALS unit arrives on scene prior to completing that skill, the EMT may continue the skill with the approval and under the direction of the arriving SLO accredited paramedic, if the continuation of the skill expedites necessary patient care.

J. An authorized EMT, while on duty with an approved provider, may perform Basic Scope of Practice Additional Skills for any patient at the request and under the direction of an on scene SLO accredited paramedic.

K. During a mutual aid response into another jurisdiction, an authorized EMT may utilize the Basic Scope of Practice Additional Skills for which they are authorized for use by their EMS Provider Agency in SLO.

L. Any costs incurred creating, implementing, and maintaining for the use of Basic Scope of Practice Additional Skills will be the sole responsibility of the EMS Provider Agency.

M. Devices and supplies required for utilizing Basic Scope of Practice Additional Skills will be maintained in accordance with drug manufacturer recommendations including, but not limited to expiration dates, storage, use, disposal, and temperature.

N. The approval of Basic Scope of Practice Additional Skills does not expire. When approved skills are no longer desired for use by the EMS Provider Agency, a written notification must be submitted to SLOEMSA.

O. SLOEMSA may audit all documentation and records pertaining to the use of Basic Scope of Practice Additional Skills.

P. Patient care will be documented according to SLOEMSA Policy #124, Documentation of Prehospital Care.

Q. Current CCR supersedes this policy.

R. The SLOEMSA Medical Director must approve any exceptions to the requirements of this policy.

V. PROCEDURE:

A. EMS Provider Agencies who do not wish to utilize the EMT Basic Scope of Practice Additional Skills must notify SLOEMSA in writing of that decision.

B. EMS Provider Agencies who would like to utilize EMT Basic Scope of Practice Additional Skills need to submit the following to SLOEMSA:

1. An EMT Basic Scope of Practice Additional Skills Coordinator who will be responsible for authorization oversight and compliance with policy and CCR.

2. A description of the plans for initial competency and ongoing competency verification for authorized EMTs.

3. A written procedure for ongoing EMSQIP activities specific to the use of EMT Basic Scope of Practice Additional Skills.

VI. AUTHORITY

- Title 22, California Code of Regulations, Division 9.

Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

POLICY # (2XX): EMT Optional Skills Approval

I. PURPOSE

A. To establish criteria for approval, including requirements and responsibilities, of Emergency Medical Services (EMS) Provider Agencies to adopt all or part(s) of the Emergency Medical Technician (EMT) Optional Skills, for their Agency's use in the County of San Luis Obispo (SLO).

II. SCOPE

A. This policy applies to SLO EMS Provider Agencies, fire departments and ambulance providers, that employ individuals as EMTs for emergency medical care in the SLO EMS system.

III. DEFINITIONS

- EMS Provider Agency: An agency or organization in SLO that is responsible for and approved to provide emergency medical care using certified/accredited EMTs and/or paramedics.
- Emergency Medical Technician (EMT): A person who has a current and valid EMT certification issued in California.
- EMT Accreditation: The local authorization of EMTs to use EMT Optional Skills by SLO Emergency Medical Services Agency (SLOEMSA). Refer to Policy #216 for complete EMT Accreditation process and requirements.
- EMT Optional Skills: Refers to skills listed in Title 22, California's Code of Regulations (CCR), as optional skills that require Medical Director policy and procedure for approval and EMT accreditation.

IV. POLICY

A. An EMS Provider Agency must apply to SLOEMSA and be approved prior to implementing training, competencies, and skill utilization on one or more EMT Optional Skills.

B. SLOEMSA will notify the applicant within twenty-one (21) business days of receiving the application of its decision to approve or deny the application.

C. SLOEMSA may revoke or suspend the EMS provider agency's EMT Optional Skills approval for failure to meet and maintain the requirements of this policy.

D. EMTs trained and verified to use any EMT Optional Skill must be accredited by SLOEMSA as outlined in Policy # 216, EMT Accreditation.

1. When an accredited EMT has started an EMT Optional Skill and an ALS unit arrives on scene prior to completing that skill, the EMT may continue the skill with the approval and under the direction of the arriving SLO accredited paramedic, if the continuation of the skill expedites necessary patient care.

2. An accredited EMT, while on duty with an approved provider, may perform Optional Skills for any patient at the request and under the direction of an on scene SLO accredited paramedic.
3. During a mutual aid response into another jurisdiction, an accredited EMT may utilize the EMT Optional Skills for which they are authorized for use by their EMS Provider Agency in SLO.

E. EMTs who fail to meet and/or maintain training, competency, and accreditation requirements may not utilize their EMS Provider Agency's approved EMT Optional Skills.

F. Ongoing training, continued competency verification, and accreditation for personnel must be completed and documented every two (2) years or more frequently as demonstrated by the EMS Provider Agency's EMS Quality Improvement Program (EMSQIP).

G. Any costs incurred while creating, implementing, and maintaining for the use of EMT Optional Skills will be the sole responsibility of the EMS provider agency.

H. Devices and supplies required for utilizing EMT Optional Skills will be maintained in accordance with drug manufacturer recommendations including, but not limited to expiration dates, storage, use, disposal, and temperature.

I. Primary instructor(s) must be a physician, registered nurse, physician assistant, or paramedic licensed in California.
1. Verification of primary instructor's eligibility is the responsibility of the EMS Provider Agency.
2. An accredited EMT authorized to EMT Optional Skill(s) may assist in demonstration of competency and training of those skills.

J. Training will include a written examination, instructor demonstration, and student demonstration of each skill, verifying competency.
1. Attachment B – EMT Optional Skills Training Requirements has specific training requirements outlined for each EMT Optional Skill.
2. The SLOEMSA Medical Director may require the use of specific training materials. If so, the materials will be provided along with the EMS Provider Agency's approval for EMT Optional Skill(s).

K. The approval of EMT Optional Skills will be valid for four (4) years from the approval date.
1. To maintain approval, reapply using the procedures listed below.
2. If EMT Optional Skills are no longer wanted or needed, submit a written notification to SLOEMSA.

L. SLOEMSA may audit all documentation and training records pertaining to the use of EMT Optional Skills.

M. Patient care will be documented according to SLOEMSA Policy #124, Documentation of Prehospital Care.

N. A non-refundable fee will be collected as part of the application and review requirements. An application whose check returns for insufficient funds may result in denial or suspension until fee is paid and will incur additional fees as outlined in SLOEMSA Policy #101, Fee Collection.

O. Current CCR supersedes this policy.

P. The SLOEMSA Medical Director must approve any exceptions to the requirements of this policy.

V. PROCEDURE

A. The EMS Provider Agency requesting to implement EMT Optional Skills must submit a complete application to SLOEMSA, which includes the following:

1. A letter of intent that describes the need and geographic area where one or more of the EMT Optional Skills will be utilized. The letter needs to be signed by a Chief Officer or Operations Director agreeing to abide by SLOEMSA policies, procedures, and all laws and regulations regarding EMT Optional Skills.

2. Identify an EMT Optional Skills Liaison who will be responsible for the EMS Provider Agency's approval oversight.

3. Identify primary instructor(s) and verify eligibility.

4. A copy of all training materials, including presentations, handouts, written exams, and descriptions of skill demonstrations that verify competency in each skill.

5. A description of the plans for initial and ongoing training and competency verification for authorized EMTs.

6. A written procedure for ongoing EMSQIP activities specific to the use of EMT Optional Skills.

7. Payment of fee.

VI. AUTHORITY

- Title 22, California Code of Regulations, Division 9.

VII. ATTACHMENTS

A. EMT Optional Skills Application

B. EMT Optional Skills Training Requirements

Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

County of San Luis Obispo Public Health Department | Policy 2XX Attachment B

Division: Emergency Medical Services Agency | Effective Date: xx/xx/xxxx

EMT Optional Skills Training Requirements

To be used for initial and ongoing training and competency verification of EMT Optional Skills.

1. Use of perilaryngeal airway adjuncts:

(A) Training in the use of perilaryngeal airway adjuncts shall consist of not less than five (5) hours to result in the EMT being competent in the use of the device and airway control. Included in the above training hours shall be the following topics and skills:
1. Anatomy and physiology of the respiratory system.
2. Assessment of the respiratory system.
3. Review of basic airway management techniques, which includes manual and mechanical.
4. The role of the perilaryngeal airway adjuncts in the sequence of airway control.
5. Indications and contraindications of the perilaryngeal airway adjuncts.
6. The role of pre-oxygenation in preparation for the perilaryngeal airway adjuncts.
7. Perilaryngeal airway adjuncts insertion and assessment of placement.
8. Methods for prevention of basic skills deterioration.
9. Alternatives to the perilaryngeal airway adjuncts.

(B) At the completion of initial training a student shall complete a competency-based written and skills examination for airway management which shall include the use of basic airway equipment and techniques and use of perilaryngeal airway adjuncts.

(C) EMT shall demonstrate skills competency at least every two (2) years, or more frequently as determined by the EMSQIP.

2. Administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma:

(A) Training in the administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma shall consist of no less than two (2) hours to result in the EMT being competent in the use and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe and managing a patient of a suspected anaphylactic reaction and/or experiencing severe asthma symptoms. Included in the training hours listed above shall be the following topics and skills:
1. Names
2. Indications
3. Contraindications
4. Complications
5. Side/adverse effects
6. Interactions
7. Routes of administration
8. Calculating dosages
9. Mechanisms of drug actions
10. Medical asepsis
11. Disposal of contaminated items and sharps
12. Medication administration

(B) At the completion of this training, the student shall complete a competency based written and skills examination for the use and/or administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, which shall include:
1. Assessment of when to administer epinephrine,
2. Managing a patient before and after administering epinephrine,
3. Using universal precautions and body substance isolation procedures during medication administration,
4. Demonstrating aseptic technique during medication administration,
5. Demonstrating preparation and administration of epinephrine by prefilled syringe and/or drawing up the proper drug dose into a syringe, and
6. Proper disposal of contaminated items and sharps.

3. Administer the medications listed in this subsection:

(A) Using prepackaged products, the following medications may be administered:
1. Atropine
2. Pralidoxime Chloride

(B) This training shall consist of no less than two (2) hours of didactic and skills laboratory training to result in competency. In addition, a basic weapons of mass destruction training is recommended. Training in the profile of medications listed in subsection (A) shall include, but not be limited to:
1. Indications
2. Contraindications
3. Side/adverse effects
4. Routes of administration
5. Dosages
6. Mechanisms of drug action
7. Disposal of contaminated items and sharps
8. Medication administration

(C) At the completion of this training, the student shall complete a competency based written and skills examination for the administration of medications listed in this subsection which shall include:
1. Assessment of when to administer these medications,
2. Managing a patient before and after administering these medications,
3. Using universal precautions and body substance isolation procedures during medication administration,
4. Demonstrating aseptic technique during medication administration,
5. Demonstrating the preparation and administration of medications by the intramuscular route, and
6. Proper disposal of contaminated items and sharps.

4. Monitor preexisting vascular access devices and intravenous lines delivering fluids with additional medications pre-approved by the Director of the Authority. Approval of such medications includes SLOEMSA applying to EMS Authority and will be obtained pursuant to CCR procedures.

POLICY #216: EMT ACCREDITATION

I. PURPOSE

A. To establish criteria as defined by Title 22 of the California Code of Regulations (CCR), for the local accreditation of emergency medical technicians (EMTs) in the County of San Luis Obispo.

II. SCOPE

A. This policy applies to EMTs working for any County of San Luis Obispo (SLO) Emergency Medical Services (EMS) Provider Agency, who have been trained and successfully completed competency-based evaluations on each EMT Optional Skill approved for their EMS Provider Agency.

III. DEFINITIONS

- EMS Provider Agency: An agency or organization in SLO that is responsible for and approved to provide emergency medical care using certified/accredited EMTs and/or paramedics.
- Emergency Medical Technician (EMT): A person who has a current and valid EMT certification issued in California.
- EMT Accreditation: The local authorization of EMTs to use EMT Optional Skills by SLO Emergency Medical Services Agency (SLOEMSA).
- EMT Optional Skills: Refers to skills listed in the CCR as optional skills that require Medical Director policy and procedure for approval and EMT accreditation.

IV. POLICY

A. Candidates for initial accreditation must complete the mandatory training conducted by their EMS Provider Agency and pass the competency based written and skills evaluations.

B. Initial accreditation will be valid from the date of accreditation until the end of the EMTs current certification. Reaccreditation will then correspond with their two-year EMT certification cycle.

C. EMT accreditation will expire when an EMT is no longer employed by an approved EMS Provider Agency in SLO or if the EMT fails to meet any of the requirements of this policy.

D. Ongoing training, continued competency verification, and accreditation for personnel must be completed and documented every two (2) years or more frequently as demonstrated by the EMS Provider Agency's EMS Quality Improvement Program (EMSQIP).

E. The EMS Provider Agency will provide a list of all accredited EMTs to SLOEMSA. This list shall be maintained and provided to SLOEMSA when updated.

F. Accredited EMTs may use EMT Optional Skills in the following situations:

1. When on duty with their EMS Provider Agency.
2. When an accredited EMT has started an EMT Optional Skill and an ALS unit arrives on scene prior to completing that skill, the EMT may continue the skill with the approval and under the direction of the arriving SLO accredited paramedic, if the continuation of the skill expedites necessary patient care.
3. An accredited EMT may perform Optional Skills for any patient at the request and under the direction of an on scene SLO accredited paramedic.
4. During a mutual aid response into another jurisdiction, an accredited EMT may utilize the EMT Optional Skills for which they are authorized for use by their EMS Provider Agency in SLO.

G. Once accredited and based on the continuous EMSQIP, the employer or SLOEMSA Medical Director may determine that an accredited EMT needs additional training, observation, or testing. The employer and SLOEMSA's Medical Director, may create a specific and targeted program of remediation based on the identified need of the EMT. If there is disagreement between the EMT, the employer and/or SLOEMSA's Medical Director, the decision of SLOEMSA's Medical Director will prevail.

H. The SLOEMSA Medical Director shall approve exceptions to any accreditation requirement.

I. Current CCR will supersede this policy.

V. PROCEDURE

A. Initial accreditation: The date of initial accreditation is valid when an authorized representative of the EMT's approved EMS Provider Agency completes and forwards the following documentation to SLOEMSA.

1. A list of all EMTs that have successfully completed the initial EMT Optional Skills training curriculum including written test and skills assessment. List shall include:
    a. Name of the skill(s) tested.
    b. Name of EMT personnel being accredited.
    c. Date training and assessment completed.
    d. State EMT certification number.
    e. State EMT certification expiration date (accreditation expiration date).

B. SLOEMSA will review and send a notification of receipt to the approved EMS Provider Agency.

C. Reaccreditation: At least every two years, or more often as deemed necessary by the EMSQIP, the approved EMS Provider Agency will provide refresher training, as necessary, to ensure the EMT can demonstrate competency through a written test and skill(s) assessment.

1. The approved EMS Provider Agency will submit an updated list of all EMTs that have successfully completed the reaccreditation refresher training, including a written test and skills assessment.

VI. AUTHORITY

- Title 22, California Code of Regulations, Division 9.

Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

POLICY #2XX: EMT AED SERVICE PROVIDER APPROVAL

I. PURPOSE

A. To establish criteria as defined by Title 22 of the California code of Regulations (CCR), for the approval, requirements and responsibilities of an emergency medical technician (EMT) automatic external defibrillation (AED) Service Provider in the County of San Luis Obispo (SLO).

II. SCOPE

A. This policy applies to all agencies or organizations that employ individuals as EMTs for emergency medical services (EMS) and obtain AEDs for the purpose of providing AED services to the general public.

1. Except for State or Federal Agencies, who are approved by the State.

III. DEFINITIONS

A. EMS Provider Agency: An agency or organization in SLO that is responsible for and approved to provide emergency medical care using certified/accredited EMTs and/or paramedics.

IV. POLICY

A. An EMS Provider Agency must submit a written request to the County of SLO Emergency Medical Services Agency (SLOEMSA) to be approved as an EMT AED Service Provider.

B. SLOEMSA will provide a written response to the request within twenty-one (21) days.

C. An approved EMT AED Service Provider must provide an orientation of specific AED equipment to all EMTs upon hiring and prior to authorization for use on a patient.

D. An approved EMT AED Service Provider must ensure initial and continued competence of AED authorized EMTs.

E. EMTs who fail to meet and maintain AED competency will not be authorized to use an AED on a patient.

F. An approved EMT AED Service Provider must ensure maintenance of AED equipment.

G. An EMT AED Service Provider approval may be revoked or suspended for failure to maintain the requirements of this policy and CCR.

1. Current CCR supersedes this policy.

H. Patient care will be documented according to SLOEMSA Policy #124, Documentation of Prehospital Care, and include data required in section I for each occurrence.

I. An approved EMT Service Provider will track and submit the following data annually or when requested by SLOEMSA:

1. The total number of patients with sudden cardiac arrest receiving CPR prior to arrival of emergency medical care.
2. The number of patients on whom shocks were administered, witnessed (seen or heard) and not witnessed.
3. The number of these persons who suffered a witnessed cardiac arrest whose initial monitored rhythm was ventricular tachycardia or ventricular fibrillation.

J. An EMT AED Service Provider approval does not expire.

1. If approval is no longer wanted or required, the EMS Provider Agency must submit a written notification to SLOEMSA.

K. Any costs incurred creating, implementing and maintaining an EMT AED Service Provider approval will be the sole responsibility of the EMS Provider Agency.

L. An approved EMT AED Service Provider and its authorized EMTs will be recognized statewide.

M. SLOEMSA's Medical Director must approve any exceptions to the requirements of this policy.

V. PROCEDURE

A. EMS Provider Agencies seeking approval as an EMT AED Service Provider must submit a written request to SLOEMSA, and include:

1. A statement that all employed EMTs either have been or will be oriented to the Agency's specific AED equipment prior to use on a patient.
2. A statement ensuring continued competency of AED authorized EMTs.
3. A statement ensuring continued maintenance of AED equipment.

VI. AUTHORITY

- Title 22, California Code of Regulations, Division 9

Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

POLICY #204: PUBLIC SAFETY AED SERVICE PROVIDER APPROVAL

I. PURPOSE

A. To establish criteria as defined by Title 22 of the California code of Regulations (CCR), for the approval, requirements and responsibilities of a Public Safety automatic external defibrillation (AED) Service Provider in the County of San Luis Obispo (SLO).

II. SCOPE

A. This policy applies to all agencies or organizations that employ individuals as public safety personnel, lifeguard, firefighter, and peace officer, for first responder emergency medical services (EMS) and obtain AEDs for the purpose of providing AED services to the general public.

1. Except for State or Federal Agencies, who are approved by the State.

III. DEFINITIONS

- Public Safety AED Service Provider: An agency, or organization which is responsible for, and is approved to operate, an AED.
- Public Safety Agency: An agency in SLO that employs Public Safety Personnel.
- Public Safety Personnel:
  - Firefighters: Any officer, employee or member of a fire department or fire protection or firefighting agency of the State of California, or any city, county, city and county, district or other public or municipal corporation or political subdivision of California or any member of an emergency reserve unit of a volunteer fire department or fire protection district.
  - Lifeguards: Any officer, employee, or member of a public aquatic safety department or marine safety agency of the State of California, or any city, county, city and county, district or other public or municipal corporation or political subdivision of California.
  - Peace Officers: Any city police officer, sheriff, deputy sheriff, peace officer member of the California Highway Patrol, marshal or deputy marshal or police officer of a district authorized by statute to maintain a police department or other police officer required by law to complete PSFA training.

IV. POLICY

A. A Public Safety Agency must submit a written request to the County of SLO Emergency Medical Services Agency (SLOEMSA) to be approved as a Public Safety AED Service Provider.

B. SLOEMSA will provide a written response to the request within twenty-one (21) days.

C. An approved Public Safety AED Service Provider must provide an orientation of specific AED equipment to all Public Safety Personnel upon hiring and prior to authorization for use on a patient.

D. An approved Public Safety AED Service Provider must ensure initial and continued competence of AED authorized Public Safety Personnel.

E. Public Safety Personnel who fail to meet and maintain AED competency will not be authorized to use an AED on a patient.

F. An approved Public Safety AED Service Provider must ensure maintenance of AED equipment.

G. A Public Safety AED Service Provider approval may be revoked or suspended for failure to maintain the requirements of this policy and CCR.

1. Current CCR supersedes this policy.

H. Patient care provided by Public Safety Personnel will be reported and handed off to any arriving EMS personnel who is authorized at a higher medical level, as soon as is feasible.

~~I. An approved Public Safety Service Provider will track and submit the following data, annually:~~

~~1. The total number of patients with sudden cardiac arrest receiving CPR prior to arrival of emergency medical care.~~

~~2. The number of patients on whom shocks were administered, witnessed (seen or heard) and not witnessed.~~

~~3. The number of these persons who suffered a witnessed cardiac arrest whose initial monitored rhythm was ventricular tachycardia or ventricular fibrillation.~~r

~~J.~~I. A Public Safety AED Service Provider approval does not expire.

1. If approval is no longer wanted or required, the Public Safety Agency must submit a written notification to SLOEMSA.

~~K.~~J. Any costs incurred creating, implementing and maintaining a Public Safety AED Service Provider approval will be the sole responsibility of the Public Safety Agency.

~~L.~~K. An approved Public Safety AED Service Provider and its authorized Public Safety Personnel will be recognized statewide.

~~M.~~L. SLOEMSA's Medical Director must approve any exceptions to the requirements of this policy.

V. PROCEDURE

A. Public Safety Agencies seeking approval as a Public Safety AED Service Provider must submit a written request to SLOEMSA, and include:

1. A statement that all employed Public Safety Personnel either have been or will be oriented to the Agency's specific AED equipment prior to use on a patient.
2. A statement ensuring continued competency of AED authorized Public Safety Personnel.
3. A statement ensuring continued maintenance of AED equipment.

AUTHORITY

- Title 22, California Code of Regulations, Division 9

VI. Approvals:

EMS Agency, Administrator	
EMS Agency, Medical Director	

COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT
Nicholas Drews *Health Agency Director*
Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

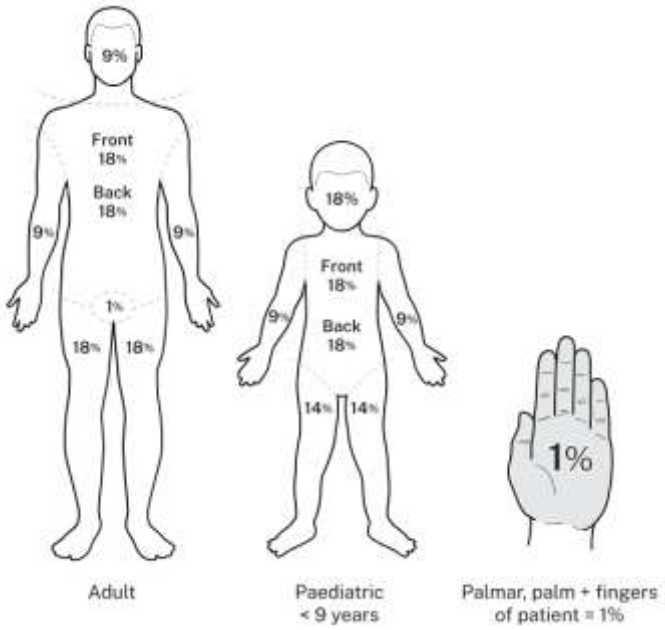
MEETING DATE	December 18, 2025
STAFF CONTACT	Ryan Rosander, EMS Director 805.788.2512 rrosander@co.slo.ca.us
SUBJECT	Burns and Dive Emergencies
SUMMARY	The EMS Agency was recently reminded by the Diablo Canyon Fire Department and other stakeholders that San Luis Obispo County currently lacks a dedicated Dive Emergency Protocol, creating a significant gap in guidance for first responders operating along our coastline. While existing protocols address elements such as airway management, drowning, seizures, and capnography, there is no unified standard for treating conditions unique to diving incidents, including decompression sickness, arterial gas embolism, barotrauma, and Swimming-Induced Pulmonary Edema. To address this need, staff propose developing a comprehensive Dive Emergency Protocol that outlines assessment priorities, 100% oxygen administration, advanced airway considerations, essential dive history elements, and guidance on transporting the patient with their dive equipment. Establishing this protocol will enhance consistency, improve patient outcomes, and align SLO County with other coastal EMS systems, and staff request committee direction to proceed with development and stakeholder review. The EMS Agency is updating the County's Burn Protocol to give first responders clear and consistent direction when treating thermal, chemical, electrical, and inhalation injuries. The protocol will reinforce core steps such as stopping the burning process, cooling and irrigating when appropriate, applying dry sterile dressings, watching closely for airway compromise, and providing age-appropriate medications and fluids. It will also include recognized burn center referral criteria and keep Policy #155 to guide when helicopter transport to an out-of-county burn center is appropriate. These updates will improve consistency across the system and help ensure that burn patients receive the right care and timely access to specialty treatment.
REVIEWED BY	Dr. William Mulkerin, SLOEMSA Staff, Diablo Canyon Staff, Operations
RECOMMENDED ACTION(S)	Recommended the following for approval by Operations and moved to the Clinical Advisory agenda: Protocol #662: Burns, #664: Diving Emergencies
ATTACHMENT(S)	Protocol #662, #664

BURNS

ADULT	PEDIATRIC (≤34 KG)
BLS	
• **Universal Protocol #601** • Pulse Oximetry - O2 administration per Airway Management Protocol #602 • **Thermal Burns:** Stop the burning process. Do not break blisters. Cover the affected body surface with a dry, sterile dressing or sheet • **Chemical Burns:** Brush off dry powder, if present. Remove any contaminated or wet clothing. Irrigate with copious amounts of saline or water. • **Tar Burns:** Cool with water; do not remove tar. • **Electrical Burns:** Turn off the power source and safely remove the victim from the hazard area. Cover the affected body surface with a dry, sterile dressing or sheet. • Additional skills as approved by SLOEMSA • Consider Policy #155: EMS Helicopter Operations for direct transport out of the county to a burn center. • Determination of Death on Scene: Refer to SLOEMSA Policy #125 - Determination of Death/Do Not Resuscitate (DNR)/End of Life Care.	**Same as Adult**
ALS	
• Protocol #603: Pain Management • For wheezing, **Albuterol** 2.5-5 mg via HHN/Mask/CPAP/BVM with adjunct over 5-10 min	• Protocol #603: Pain Management • For wheezing **Albuterol** 2.5-5 mg via HHN/Mask/BVM with adjunct over 5-10 min <u>Combined with:</u>

Combined with: • **Ipratropium Bromide** 500 mcg via HHN/Mask/CPAP/BVM with adjunct over 5-10 min - Repeat once after 20 minutes • **Consider Normal Saline up to 500mL IV/IO** - May repeat x1 for persistent hypotension. - May repeat x1 based on ALS provider discretion for normotensive patients.	• **Ipratropium Bromide** 250 mcg via HHN/Mask/BVM with adjunct over 5-10 min - Repeat once after 20 minutes • **Consider Normal Saline up to 20mL/kg IV/IO, not to exceed 500 mL** - May repeat x1 for persistent hypotension. - May repeat x1 based on ALS provider discretion for normotensive patients.
Base Hospital Orders Only	
• As needed	• As needed
Notes	

• **Endotracheal intubation remains the gold standard** for airway management in burn patients due to the rapid and often unpredictable progression of upper airway edema following thermal injury or inhalation of superheated gases. Facial burns, singed nasal hairs, carbonaceous sputum, stridor, or voice changes may signal impending airway obstruction.



• **For reference, burn center referral criteria are:**
- Partial-thickness burns of greater than 10 percent of the total body surface area.
- Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
- Third-degree burns in any age group.
- Electrical burns, including lightning injury.
- Chemical burns.
- Inhalation injury.
- Burn injury in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
- Burns and concomitant trauma (such as fractures) when the burn injury poses the greatest risk

of morbidity or mortality. If the trauma poses the greater immediate risk, the patient's condition may be stabilized initially in a trauma center before transfer to a burn center. Physician judgment will be necessary in such situations and should be in concert with the regional medical control plan and triage protocols.

- Burns in children; children with burns should be transferred to a burn center verified to treat children. In the absence of a regional pediatric burn center, an adult burn center may serve as a second option for the management of pediatric burns.
- Burn injury in patients who will require special social, emotional, or rehabilitative intervention

DIVING EMERGENCIES

ADULT	PEDIATRIC (≤34 KG)
BLS	

• Universal Protocol #601
• **100% O2 administration via NRB mask, regardless of signs, symptoms, or SpO2, unless oxygen toxicity is the suspected etiology**
• Airway Management Protocol #602
  - Pulse Oximetry
• Procedure #701: Capnography End Tidal CO2 Monitoring
• Additional skills as approved by SLOEMSA (e.g., i-Gel placement)
• Always treat and transport the patient **supine** unless actively vomiting or the patient does not tolerate the supine position
• If applicable, Protocol #663: Drowning
• If applicable, Protocol #620: Seizure
• Address hypothermia and warming measures
• Obtain and transport the patient with their dive computer and all their dive gear, including regulator, weights, tank, buoyancy control device, etc., if possible. Do not delay transport.
  - Obtain maximum dive depth, time spent at depth, rate of ascent, number of dives, surface interval, gas(es) used (e.g., standard air, Nitrox, Trimix, Heliox, Hyperoxic Mix (100%) O2
• Consider Policy #155: EMS Helicopter Operations for direct transport out of the county to a hyperbaric chamber.
	Same as Adult

ALS	
• Consider Normal Saline up to 500mL IV/IO for	• Consider Normal Saline up to 20mL/kg IV/IO,

possible dehydration • If barotrauma is suspected, with symptoms of tension pneumothorax– Needle Thoracostomy Procedure #705 • Frequent neurologic exams	not to exceed 500 mL for possible dehydration • If barotrauma is suspected, with symptoms of tension pneumothorax– Needle Thoracostomy Procedure #705
Base Hospital Orders Only	
• As needed	• As needed

Notes

- The number one cause of diving fatalities is drowning.
- Due to the possibility of barotrauma, CPAP is generally contraindicated for patients with a dive emergency.
- C-Spine immobilization is not recommended except with strong evidence/report of traumatic mechanism.
- Seizures can occur during diving emergencies and are most often caused by oxygen toxicity, hypoxia, hypercapnia, or arterial gas embolism
- **Swimming-Induced Pulmonary Edema (SIPE)** happens when immersion in cold water and exertion increases central blood volume and pulmonary capillary pressure, causing fluid to leak into the alveoli without aspiration or drowning. The result is pulmonary edema despite the absence of water inhalation.
    - If SIPE is suspected and the patient has moderate/severe SOB, call base hospital for orders (e.g., CPAP)
- **Decompression sickness (DCS) or the bends** happen when dissolved inert gases (mainly nitrogen) come out of solution and form bubbles in the bloodstream and tissues during ascent. These bubbles can cause blockages, inflammation, and tissue damage throughout the body.
- **Arterial Gas Embolism (AGE)** is one of the most serious diving-related medical emergencies. It occurs when air bubbles enter the arterial bloodstream, usually due to lung overexpansion injury during ascent. Holding a single breath while ascending can cause this condition, with symptoms often appearing within seconds to minutes of surfacing.
- **Oxygen toxicity** occurs when a diver breathes oxygen at a high partial pressure (PPO_2) for too long, causing toxic effects on the brain and lungs. It is primarily a concern when diving deep on enriched air (Nitrox) or pure oxygen in technical or rebreather diving.
- **Carbon monoxide (CO) poisoning** occurs when compressed breathing gas inside a scuba tank becomes contaminated with carbon monoxide, usually due to a faulty compressor intake or malfunctioning filtration system. Even very low levels of CO in a dive tank can be lethal under pressure, because the gas's partial pressure increases with depth, worsening its toxic effects.
- **Nitrogen narcosis:** A reversible condition in divers caused by the increased partial pressure of nitrogen at depth, leading to euphoria, confusion, poor judgment, and impaired coordination. Nitrogen narcosis is often described as the "rapture of the deep" and relieved by ascending to a shallower depth.
- Divers Alert Network: 919-684-9111 is an additional resource that may be helpful, either for EMS crews or for receiving hospitals, to discuss possibilities for hyperbaric chamber therapy.